

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-3 and 15 are pending in the application. No claim amendments are presented, thus no new matter is added.

In the Office Action, Claims 1-3 and 15 are rejected under 35 U.S.C. § 103(a) as unpatentable over Jung (U.S. Pat. 6,020,925, herein the '925 patent) in view of Swonger (U.S. Pat. 4,754,490, herein the '490 patent) and Gaffin et al. (U.S. Pat. 6,625,317, herein the '317 patent); and Claims 1-3 and 15 are rejected under 35 U.S.C. § 103(a) as unpatentable over Kondo (JP 11258472, herein the '472 patent) in view of Kondo (U.S. Pat. 5,576,772, herein the '772 patent), the '490 patent, and the '317 patent.

In response to the above noted rejections under 35 U.S.C. § 103, Applicants respectfully submit that amended independent Claims 1-3 and 15 recite novel features clearly not taught or rendered obvious by the applied references.

Independent Claim 1, for example, recites an image processing apparatus for compressing an input image using a motion vector, the image processing apparatus comprising:

means for storing position information of each pixel ... ***at an address*** corresponding to a feature value ***that is based on*** a value of said each pixel and ***a pixel peripheral to said each pixel*** ...

Independent Claims 2-3 and 15, while directed to alternative embodiments, recite similar features. Accordingly, the remarks and arguments presented below are applicable to each of independent Claims 1-3 and 15.

As disclosed in an exemplary embodiment at Figs. 5-6 and p. 20, l. 15 – p. 24, l. 19 of the specification, the position information of each pixel of the first frame is stored at an address (e.g. 0, 0 ... a, b, as depicted in Fig. 5) in a database based on the value of each pixel

and a pixel peripheral to each pixel. Otherwise stated, the position information of each pixel is stored at an address that is determined by the pixels preceding and following the pixel for which the position information is to be stored using the process shown, for example, in Fig. 6.

In rejecting Claims 1-3 and 15, the Office Action concedes that none of the '925 patent, the '472 patent, nor the '772 patent disclose "stor[ing] position information of each pixel of a frame at an address corresponding to a feature value that is based on a value of the pixel, the feature value representing a feature of the pixel" or "that the feature is based on a value of the pixel and a pixel peripheral to the pixel". In an attempt to cure these deficiencies, the Office Action relies on the '490 and '317 patents, respectively, and asserts that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to arrive at Applicants claims. Applicants respectfully traverse this assertion.

In rejecting the claimed features directed to storing the position information, the Office Action relies on the '490 patent. The '490 patent describes a method for linked-list image feature extraction. More particularly, the '490 patent describes that each pixel within an array of pixels has a pixel value selected from among a plurality of possible pixel values. As the pixels are recalled from the array of pixels in a raster scan fashion, a pixel address memory 115 is incremented to contain a current pixel address indicative of the location of the current pixel. If the current pixel is the first occurrence of its pixel value, the current pixel address is stored in a first occurrence pointer memory 130, and the current pixel address is stored within a last occurrence pointer memory 140 when it is the last occurrence of its pixel value.<sup>1</sup> The '490 patent, as cited in the Office Action, also describes a linked-list memory

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<sup>1</sup> The '490 patent, Abstract and Fig. 1.

160 that builds a linked-list in accordance with pixel values of pixels received from a raster scan extractor 30.<sup>2</sup>

Thus, the ‘490 patent describes that each pixel is associated with an address, and that this address may be stored in one or more of a plurality of memories based on a pixel value corresponding to that pixel. Claim 1, however, recites “storing position information of each pixel ... *at an address ... that is based on* a value of said each pixel and *a pixel peripheral to said each pixel...*” The ‘490 patent fails to teach or suggest that the location in memory at which the address of the pixel is stored is based on a pixel peripheral to the pixel, whatsoever. Instead, as discussed above, the ‘490 patent describes that each pixel is associated with an address, and that this address may be stored in one or more of a plurality of memories based on a pixel value corresponding to that pixel.

The Office Action also cites the ‘317 patent, and assert that this reference discloses “that the feature is based on a value of the pixel and a pixel peripheral to the pixel”. However, as clarified above, independent Claims 1-3 and 15 recite “storing position information of each pixel ... *at an address ... that is based on* a value of said each pixel and *a pixel peripheral to said each pixel ...*” Thus, the claims recite that the *address* at which position information is stored for a pixel is based on a pixel peripheral to the pixel, not that the feature value is based on a pixel peripheral to said pixel. Neither the ‘490 patent, nor the ‘317 patent, teach or suggest this claimed feature.

Therefore, the applied references, neither alone, nor in combination, teach or suggest an image processing apparatus for compressing an input image using a motion vector, the image processing apparatus “storing position information of each pixel ... *at an address ... that is based on* a value of said each pixel and *a pixel peripheral to said each pixel ...*”, as recited in independent Claims 1-3 and 15.

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<sup>2</sup> Id., col. 3, ll. 17-24.

Accordingly, for at least the reasons discussed above, Applicants respectfully request that the rejections of Claims 1-3 and 15 under 35 U.S.C. § 103 be withdrawn.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-3 and 15 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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